

SEQUENCE LISTING

SEQ ID No.:1

SEQUENCE LENGTH: 351

SEQUENCE TYPE: amino acid

TOPOLOGY: linear

MOLECULAR TYPE: protein

SEQUENCE:

Ala	Glu	Met	Thr	Thr	Phe	Ser	Gln	Lys	Ile	Leu	Ala	Asn	Ala	Cys	Thr
1				5					10					15	
Leu	Val	Met	Cys	Ser	Pro	Leu	Glu	Ser	Gly	Leu	Pro	Gly	His	Asp	Gly
			20					25					30		
Gln	Asp	Gly	Arg	Glu	Cys	Pro	His	Gly	Glu	Lys	Gly	Asp	Pro	Gly	Ser
		35					40					45			
Pro	Gly	Pro	Ala	Gly	Arg	Ala	Gly	Arg	Pro	Gly	Trp	Val	Gly	Pro	Ile
	50					55				60					
Gly	Pro	Lys	Gly	Asp	Asn	Gly	Phe	Val	Gly	Glu	Pro	Gly	Pro	Lys	Gly
65				70					75				80		
Asp	Thr	Gly	Pro	Arg	Gly	Pro	Pro	Gly	Met	Pro	Gly	Pro	Ala	Gly	Arg
				85				90					95		
Glu	Gly	Pro	Ser	Gly	Lys	Gln	Gly	Ser	Met	Gly	Pro	Pro	Gly	Thr	Pro
		100					105					110			
Gly	Pro	Lys	Gly	Glu	Thr	Gly	Pro	Lys	Gly	Gly	Val	Gly	Ala	Pro	Gly
		115					120					125			
Ile	Gln	Gly	Phe	Pro	Gly	Pro	Ser	Gly	Leu	Lys	Gly	Glu	Lys	Gly	Ala
	130					135					140				
Pro	Gly	Glu	Thr	Gly	Ala	Pro	Gly	Arg	Ala	Gly	Val	Thr	Gly	Pro	Ser
145				150				155					160		
Gly	Ala	Ile	Gly	Pro	Gln	Gly	Pro	Ser	Gly	Ala	Arg	Gly	Pro	Pro	Gly
			165					170				175			
Leu	Lys	Gly	Asp	Arg	Gly	Asp	Pro	Gly	Glu	Thr	Gly	Ala	Ser	Gly	Glu
		180						185				190			
Ser	Gly	Leu	Ala	Glu	Val	Asn	Ala	Leu	Lys	Gln	Arg	Val	Thr	Ile	Leu
	195						200					205			
Asp	Gly	His	Leu	Arg	Arg	Phe	Gln	Asn	Ala	Phe	Ser	Gln	Tyr	Lys	Lys
	210					215					220				
Ala	Val	Leu	Phe	Pro	Asp	Gly	Gln	Ala	Val	Gly	Glu	Lys	Ile	Phe	Lys
225				230						235				240	

100040010001

```

SEQ ID No.:2
SEQUENCE LENGTH: 171
SEQUENCE TYPE: amino acid
TOPOLOGY: linear
MOLECULAR TYPE: protein
SEQUENCE:
Gly Leu Pro Gly His Asp Gly Gln Asp Gly Arg Glu Cys Pro His Gly
  1               5               10               15
Glu Lys Gly Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Arg
      20               25               30
Pro Gly Trp Val Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Phe Val
      35               40               45
Gly Glu Pro Gly Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Pro Gly
      50               55               60
Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser
      65               70               75               80
Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys
      85               90               95
Gly Gly Val Gly Ala Pro Gly Ile Gln Gly Phe Pro Gly Pro Ser Gly
      100               105               110
Leu Lys Gly Glu Lys Gly Ala Pro Gly Glu Thr Gly Ala Pro Gly Arg
      115               120               125

```

Gly	Leu	Pro	Gly	His	Asp	Gly	Gln	Asp	Gly	Arg	Glu	Cys	Pro	His	Gly
1				5					10					15	
Glu	Lys	Gly	Asp	Pro	Gly	Ser	Pro	Gly	Pro	Ala	Gly	Arg	Ala	Gly	Arg
			20					25					30		
Pro	Gly	Trp	Val	Gly	Pro	Ile	Gly	Pro	Lys	Gly	Asp	Asn	Gly	Phe	Val
		35					40					45			
Gly	Glu	Pro	Gly	Pro	Lys	Gly	Asp	Thr	Gly	Pro	Arg	Gly	Pro	Pro	Gly
	50					55					60				
Met	Pro	Gly	Pro	Ala	Gly	Arg	Glu	Gly	Pro	Ser	Gly	Lys	Gln	Gly	Ser
65					70					75				80	
Met	Gly	Pro	Pro	Gly	Thr	Pro	Gly	Pro	Lys	Gly	Glu	Thr	Gly	Pro	Lys
				85					90					95	
Gly	Gly	Val	Gly	Ala	Pro	Gly	Ile	Gln	Gly	Phe	Pro	Gly	Pro	Ser	Gly
		100						105					110		
Leu	Lys	Gly	Glu	Lys	Gly	Ala	Pro	Gly	Glu	Thr	Gly	Ala	Pro	Gly	Arg
	115							120				125			

Ala	Gly	Val	Thr	Gly	Pro	Ser	Gly	Ala	Ile	Gly	Pro	Gln	Gly	Pro	Ser
	130					135					140				
Gly	Ala	Arg	Gly	Pro	Pro	Gly	Leu	Lys	Gly	Asp	Arg	Gly	Asp	Pro	Gly
145					150				155					160	
Glu	Thr	Gly	Ala	Ser	Gly	Glu	Ser	Gly	Leu	Ala					
				165					170						

SEQ ID No.:3

SEQUENCE LENGTH: 3

SEQUENCE TYPE: amino acid

TOPOLOGY: linear

MOLECULAR TYPE: peptide

FEATURE

LOCATION:2

OTHER INFORMATION: 2nd amino acid is a protein-constituting amino acid.

LOCATION:3

OTHER INFORMATION: 3rd amino acid is a protein-constituting amino acid.

SEQUENCE:

Gly Xaa Xaa

1

SEQ ID No.:4

SEQUENCE LENGTH: 28

SEQUENCE TYPE: nucleic acid

STRADEDNESS: single

TOPOLOGY: linear

MOLECULAR TYPE: other nucleic acid, synthesized DNA

SEQUENCE:

GGCTCGAGGG GGAGAGTGGG CTTGCAGA

28

SEQ ID No.:5

SEQUENCE LENGTH: 28

SEQUENCE TYPE: nucleic acid

STRADEDNESS: single

TOPOLOGY: linear

MOLECULAR TYPE: other nucleic acid, synthesized DNA

SEQUENCE:

GGGAATTCTC AAAACTCGCA GATCACAA

28

1007403-10501

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: WAKAMIYA, Nobutaka
- (ii) TITLE OF INVENTION: RECOMBINANT CONGLUTININ AND PRODUCING METHOD THEREOF
- (iii) NUMBER OF SEQUENCES: 5
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
  - (B) STREET: 233 South Wacker Drive/6300 Sears Tower
  - (C) CITY: Chicago
  - (D) STATE: Illinois
  - (E) COUNTRY: United States of America
  - (F) ZIP: 60606-6402
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: PCT/JP96/00173
  - (B) FILING DATE:
  - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: PCT/JP95/02035
  - (B) FILING DATE: 02-OCT-1995
- (viii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: JPA - 209698
  - (B) FILING DATE: 17-AUG-1995
- (ix) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Gass, David A.
  - (B) REGISTRATION NUMBER: 38,153
  - (C) REFERENCE/DOCKET NUMBER: 19036/34546
- (x) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: (312) 474-6300
  - (B) TELEFAX: (312) 474-0448

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 351 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: not relevant

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Ala	Glu	Met	Thr	Thr	Phe	Ser	Gln	Lys	Ile	Leu	Ala	Asn	Ala	Cys	Thr	
1				5					10					15		
Leu	Val	Met	Cys	Ser	Pro	Leu	Glu	Ser	Gly	Leu	Pro	Gly	His	Asp	Gly	
			20					25					30			
Gln	Asp	Gly	Arg	Glu	Cys	Pro	His	Gly	Glu	Lys	Gly	Asp	Pro	Gly	Ser	
		35					40					45				
Pro	Gly	Pro	Ala	Gly	Arg	Ala	Gly	Arg	Pro	Gly	Trp	Val	Gly	Pro	Ile	
	50					55					60					
Gly	Pro	Lys	Gly	Asp	Asn	Gly	Phe	Val	Gly	Glu	Pro	Gly	Pro	Lys	Gly	
65					70					75					80	
Asp	Thr	Gly	Pro	Arg	Gly	Pro	Pro	Gly	Met	Pro	Gly	Pro	Ala	Gly	Arg	
				85					90					95		
Glu	Gly	Pro	Ser	Gly	Lys	Gln	Gly	Ser	Met	Gly	Pro	Pro	Gly	Thr	Pro	
			100					105					110			
Gly	Pro	Lys	Gly	Glu	Thr	Gly	Pro	Lys	Gly	Gly	Val	Gly	Ala	Pro	Gly	
		115					120					125				
Ile	Gln	Gly	Phe	Pro	Gly	Pro	Ser	Gly	Leu	Lys	Gly	Glu	Lys	Gly	Ala	
	130					135					140					
Pro	Gly	Glu	Thr	Gly	Ala	Pro	Gly	Arg	Ala	Gly	Val	Thr	Gly	Pro	Ser	
145					150					155					160	
Gly	Ala	Ile	Gly	Pro	Gln	Gly	Pro	Ser	Gly	Ala	Arg	Gly	Pro	Pro	Gly	
				165					170					175		
Leu	Lys	Gly	Asp	Arg	Gly	Asp	Pro	Gly	Glu	Thr	Gly	Ala	Ser	Gly	Glu	
			180					185					190			
Ser	Gly	Leu	Ala	Glu	Val	Asn	Ala	Leu	Lys	Gln	Arg	Val	Thr	Ile	Leu	
		195					200					205				
Asp	Gly	His	Leu	Arg	Arg	Phe	Gln	Asn	Ala	Phe	Ser	Gln	Tyr	Lys	Lys	
	210					215					220					
Ala	Val	Leu	Phe	Pro	Asp	Gly	Gln	Ala	Val	Gly	Glu	Lys	Ile	Phe	Lys	
225					230					235					240	
Thr	Ala	Gly	Ala	Val	Lys	Ser	Tyr	Ser	Asp	Ala	Glu	Gln	Leu	Cys	Arg	
				245					250					255		

Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu  
260 265 270

Ala Val Thr Gln Met Val Arg Ala Gln Glu Lys Asn Ala Tyr Leu Ser  
275 280 285

Met Asn Asp Ile Ser Thr Glu Gly Arg Phe Thr Tyr Pro Thr Gly Glu  
290 295 300

Ile Leu Val Tyr Ser Asn Trp Ala Asp Gly Glu Pro Asn Asn Ser Asp  
305 310 315 320

Glu Gly Gln Pro Glu Asn Cys Val Glu Ile Phe Pro Asp Gly Lys Trp  
325 330 335

Asn Asp Val Pro Cys Ser Lys Gln Leu Leu Val Ile Cys Glu Phe  
340 345 350

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: not relevant
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Gly Leu Pro Gly His Asp Gly Gln Asp Gly Arg Glu Cys Pro His Gly  
1 5 10 15

Glu Lys Gly Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Arg  
20 25 30

Pro Gly Trp Val Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Phe Val  
35 40 45

Gly Glu Pro Gly Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Pro Gly  
50 55 60

Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser  
65 70 75 80

Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys  
85 90 95

Gly Gly Val Gly Ala Pro Gly Ile Gln Gly Phe Pro Gly Pro Ser Gly  
100 105 110

Leu Lys Gly Glu Lys Gly Ala Pro Gly Glu Thr Gly Ala Pro Gly Arg  
115 120 125

Ala Gly Val Thr Gly Pro Ser Gly Ala Ile Gly Pro Gln Gly Pro Ser  
130 135 140

Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly  
145 150 155 160

Glu Thr Gly Ala Ser Gly Glu Ser Gly Leu Ala  
165 170

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: not relevant
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc.
- (B) LOCATION: 2
- (D) OTHER INFORMATION: /note= "2ND amino acid is a protein-constituting amino acid."

(ix) FEATURE:

- (A) NAME/KEY: misc.
- (B) LOCATION: 3
- (D) OTHER INFORMATION: /note= "3RD amino acid is a protein-constituting amino acid."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Gly Xaa Xaa  
1

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "synthesized DNA"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GGCTCGAGGG GGAGAGTGGG CTTGCAGA

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 28 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: other nucleic acid
  - (A) DESCRIPTION: /desc = "synthesized DNA"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GGGAATTCTC AAAACTCGCA GATCACA

28

100049-10001